



Play behavior of dairy calves in a cow-calf contact system on pasture

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Method: direct observation

- 26 cow-calf pairs
- Calves aged between 5 and 95 days
- 16 observation days over 2 months
- Total observation time
→ 48 h: Continuous sampling, 5 min observation/calf/h



Recorded behaviors

Social play



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Locomotor play



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Study by Gillet et al. (2023) 3

Age and play partner had no effect on social play duration

- Social play initiated by the calf only
- Social play bout [s] ~ Age + Sex + Receiver + (1|Herd/ID)

→ Familiarity affects the choice of playmates more than the age (Špinka, Newberry, and Bekoff 2001, TQRB 76, 141)

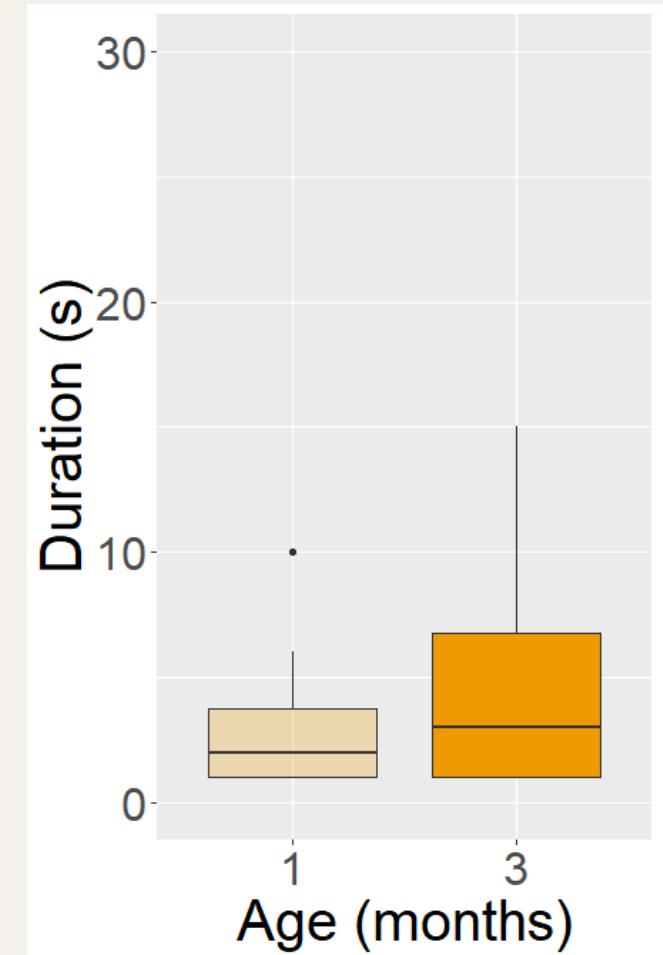
Social play bout duration [s]				
Partner	LSM	SE	p	
Calf	4.5	1.1	0.1	
Mother	4.5	1.3		
Age				
1-month	6.6	3.0	0.5	
3-month	3.4	0.9		

Age had no effect on locomotor play duration

- Duration of locomotor play [s per bout] \sim Age + Sex + (1 | Herd/ID)

Duration of locomotor play [s per bout]			
Age	LSM	SE	p
1-month	2.1	0.6	0.4
3-month	3.4	0.8	

→ Level of play behavior depends on space opportunity
 (Waiblinger et al. 2020, JDR 87, 144)



Take home message

Behavior of dairy calves in a cow-calf contact system under grazing conditions:

- Familiarity affects the choice of playmates
- Younger calves performed as much locomotor play as older ones
- Sex of calf had no effect on the observed behaviors



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Literature

Gillet, Veissier, Waiblinger and Barth, 2023. Social interactions and play behaviour of dairy calves in a cow-calf contact system on pasture, in: 56th Congress of the International Society for Applied Ethology ISAE 2023. Tallinn, Estonia.

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Waiblinger, Wagner, Hillmann and Barth. 2020. "Play and Social Behaviour of Calves with or without Access to Their Dam and Other Cows." *Journal of Dairy Research* 87 (S1): 144–47. <https://doi.org/10.1017/S0022029920000540>.



Thank you for your attention



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Questions to the audience



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